Package ‘ColombiAPI’

January 9, 2025

Type Package

Title Access Colombia's Public Data via 'API-Colombia'

Version 0.1.0

Maintainer Renzo Caceres Rossi <arenzocaceresrossi@gmail.com>

Description Provides a seamless interface to access diverse public data about Colombia through the 'API-Colombia', a RESTful API. The package enables users to explore various aspects of Colombia, including general information, geography, and cultural insights. It includes five API-related functions to retrieve data on topics such as Colombia's general information, airports, departments, regions, and presidents. Additionally, 'ColombiAPI' offers a built-in function to view the datasets available within the package. The package also includes curated datasets covering Bogota air stations, business and holiday dates, public schools, Colombian coffee exports, cannabis licenses, Medellin rainfall, and malls in Bogota, making it a comprehensive tool for exploring Colombia's data. For more details on the 'API-Colombia', see <https://api-colombia.com/>.

License GPL-3

URL https://github.com/lightbluetitan/colombiapi, https://lightbluetitan.github.io/colombiapi/

BugReports https://github.com/lightbluetitan/colombiapi/issues

Encoding UTF-8

LazyData true

Suggests ggplot2, testthat (>= 3.0.0), knitr, rmarkdown

Imports httr, jsonlite, dplyr, magrittr

RoxygenNote 7.3.2

Config/testthat/edition 3

VignetteBuilder knitr

NeedsCompilation no

Author Renzo Caceres Rossi [aut, cre]

Depends R (>= 3.5.0)

Repository CRAN

Date/Publication 2025-01-09 15:00:02 UTC

Contents

Bogota_airstations_df 2
Bogota_business_Date 3
Bogota_holidays_Date 4
Bogota_malls_tbl_df 4
Cannabis_Licenses_tbl_df 5
ColombiAPI 6
Colombia_coffee_tbl_df 7
get_airports_list 8
get_Colombia_info 10
get_departments_list 11
get_presidents_list 12
get_regions_list 14
Medellin_rain_tbl_df 15
Tulua_Public_Schools_tbl_df 16
view_datasets 17

Index **18**

Bogota_airstations_df *Bogota Air Stations Coordinates*

Description

This dataset, Bogota_airstations_df, is a data frame containing the coordinates of air quality measurement stations in Bogota, Colombia.

Usage

```
data(Bogota_airstations_df)
```

Format

A data frame with 10 observations and 3 variables:

ESTACION Character string representing the name of the station.

X Numeric value representing the X coordinate of the station.

Y Numeric value representing the Y coordinate of the station.

Details

The dataset name has been kept as Bogota_airstations_df to avoid confusion with other datasets in the R ecosystem. This naming convention helps distinguish this dataset as part of the ColombiAPI package and assists users in identifying its specific characteristics. The suffix '_df' indicates that the dataset is a data frame. The original content has not been modified in any way.

Source

Originally taken from the SpatFD package version 0.0.1

`Bogota_business_Date` *Bogota Business Dates*

Description

This dataset, Bogota_business_Date, is a Date object containing the business dates for Bogota, Colombia.

Usage

```
data(Bogota_business_Date)
```

Format

A Date object with 27,173 observations:

Bogota_business_Date Date object representing the business dates in Bogota, Colombia, ranging between "1990-01-02" and "2100-12-31".

Details

The dataset name has been kept as Bogota_business_Date to avoid confusion with other datasets in the R ecosystem. This naming convention helps distinguish this dataset as part of the ColombiAPI package and assists users in identifying its specific characteristics. The suffix '_Date' indicates that the dataset is an object of the Date class. The original content has not been modified in any way.

Source

Originally taken from the quantdates package version 2.0.4.

`Bogota_holidays_Date` *Bogota Holidays Dates*

Description

This dataset, Bogota_holidays_Date, is a Date object containing the official holidays of Bogota, Colombia.

Usage

```
data(Bogota_holidays_Date)
```

Format

A Date object with 1787 observations:

Bogota_holidays_Date Date object representing the official holidays in Bogota, Colombia, ranging between "1990-01-01" and "2100-12-08".

Details

The dataset name has been kept as Bogota_holidays_Date to avoid confusion with other datasets in the R ecosystem. This naming convention helps distinguish this dataset as part of the ColombiAPI package and assists users in identifying its specific characteristics. The suffix '_Date' indicates that the dataset is an object of the Date class. The original content has not been modified in any way.

Source

Originally taken from the quantdates package version 2.0.4. Holidays were created using the `bizdays` package.

`Bogota_malls_tbl_df` *Bogota Malls Information*

Description

This dataset, Bogota_malls_tbl_df, is a tibble containing detailed information about shopping malls located in Bogota, Colombia. It includes the mall names, physical addresses, web URLs, geographical coordinates, and the locality to which each mall belongs.

Usage

```
data(Bogota_malls_tbl_df)
```

Format

A tibble with 42 observations and 6 variables:

NAME Character string representing the name of the shopping mall.

ADDRESS Character string representing the physical address of the mall.

URL Character string representing the web URL of the mall.

LATITUD Numeric value representing the latitude of the mall.

LONGITUD Numeric value representing the longitude of the mall.

LOCALIDAD Character string representing the locality the mall belongs to.

Details

The dataset name has been kept as Bogota_malls_tbl_df to avoid confusion with other datasets in the R ecosystem. This naming convention helps distinguish this dataset as part of the ColombiAPI package and assists users in identifying its specific characteristics. The suffix 'tbl_df' indicates that the dataset is a tibble. The original content has not been modified in any way.

Source

Originally taken from Kaggle, url: https://www.kaggle.com/datasets/erik172/bogota-shopping-malls.

`Cannabis_Licenses_tbl_df`

Cannabis Licenses Information

Description

This dataset, Cannabis_Licenses_tbl_df, is a tibble containing detailed information about cannabis-related licenses issued by the Ministry of Justice and Law in Colombia. It includes data on the number of received, denied, archived, modified, and granted licenses for cannabis cultivation, as well as the licenses issued for both psychoactive and non-psychoactive cannabis plants.

Usage

```
data(Cannabis_Licenses_tbl_df)
```

Format

A tibble with 92 observations and 10 variables:

Mes Character string representing the month in which the data was recorded.

Solicitudes de licencias recibidas Numeric value representing the number of license requests received.

Solicitudes Negadas Numeric value representing the number of denied license requests.

Solicitudes Archivadas Numeric value representing the number of archived license requests.

Solicitudes Modificadas Numeric value representing the number of modified license requests.

Licencias Otorgadas Numeric value representing the number of licenses granted.

Licencias expedidas de semillas para siembra Numeric value representing the number of seed cultivation licenses issued.

Licencias expedidas de plantas cannabis psicoactivo Numeric value representing the number of psychoactive cannabis plant cultivation licenses issued.

Licencias expedidas de plantas cannabis no psicoactivo Numeric value representing the number of non-psychoactive cannabis plant cultivation licenses issued.

Año Numeric value representing the year in which the data was recorded.

Details

The dataset name has been kept as Cannabis_Licenses_tbl_df to avoid confusion with other datasets in the R ecosystem. This naming convention helps distinguish this dataset as part of the ColombiAPI package and assists users in identifying its specific characteristics. The suffix 'tbl_df' indicates that the dataset is a tibble. The original content has not been modified in any way.

Source

Originally taken from Kaggle, url: https://www.kaggle.com/datasets/josetroyatoscano/licencias-cannabis-colombia-full-dataset-feb-2024

`ColombiAPI` *ColombiAPI: Access Colombia's Public Data via API-Colombia*

Description

This package provides access to information about Colombia through the API-Colombia, a public RESTful API that enables users to obtain a variety of public information about Colombia,including general information, geography, and cultural insights.

Details

ColombiAPI: Access Colombia's Public Data via API-Colombia

Access Colombia's Public Data via API-Colombia.

Author(s)

Maintainer: Renzo Caceres Rossi <`arenzocaceresrossi@gmail.com`>

See Also

Useful links:

- `https://github.com/lightbluetitan/colombiapi`

Colombia_coffee_tbl_df

Colombian Coffee 2016 Export/Import

Description

This dataset, Colombia_coffee_tbl_df, is a tibble containing detailed information about Colombian coffee exports and imports in 2016. It includes data on various factors such as trade flow, commodity codes, trade value, weight in kilograms, and information about the countries involved in the trade. The dataset is sourced from Kaggle and provides a comprehensive analysis of the foreign trade of Colombian coffee.

Usage

```
data(Colombia_coffee_tbl_df)
```

Format

A tibble with 106 observations and 35 variables:

Classification Character string representing the classification of the coffee product.

Year Numeric value representing the year of the data entry.

Period Numeric value representing the period of the trade.

Period Desc. Numeric value representing the period description.

Aggregate Level Numeric value representing the aggregate level of the trade data.

Is Leaf Code Numeric value indicating whether the trade involves a leaf product.

Trade Flow Code Numeric value representing the trade flow code.

Trade Flow Character string representing the flow of the trade, either export or import.

Reporter Code Numeric value representing the code of the reporting country.

Reporter Character string representing the reporting country.

Reporter ISO Character string representing the ISO code of the reporting country.

Partner Code Numeric value representing the code of the partner country.

Partner Character string representing the partner country.

Partner ISO Character string representing the ISO code of the partner country.

2nd Partner Code Logical value indicating if there is a second partner country involved in the trade.

2nd Partner Logical value indicating if there is a second partner country.

2nd Partner ISO Logical value indicating if there is a second partner country's ISO code.

Customs Proc. Code Logical value representing the customs procedure code.

Customs Logical value indicating whether customs procedure information is available.

Mode of Transport Code Logical value representing the mode of transport code.

Mode of Transport Logical value indicating the mode of transport used in the trade.

Commodity Code Character string representing the commodity code for coffee.

Commodity Character string representing the commodity (coffee).

Qty Unit Code Numeric value representing the quantity unit code.

Qty Unit Character string representing the unit of quantity for the trade.

Qty Logical value representing the quantity of coffee in the trade.

Alt Qty Unit Code Logical value representing an alternative quantity unit code.

Alt Qty Unit Numeric value representing an alternative quantity unit for the trade.

Alt Qty Logical value representing an alternative quantity for the trade.

Netweight (kg) Numeric value representing the net weight of the coffee in kilograms.

Gross weight (kg) Logical value indicating the gross weight of the coffee in kilograms.

Trade Value (US) Numeric value representing the trade value in US dollars.

CIF Trade Value (US) Logical value representing the CIF trade value in US dollars.

FOB Trade Value (US) Logical value representing the FOB trade value in US dollars.

Flag Numeric value representing a flag for the dataset entry.

Details

The dataset name has been kept as Colombia_coffee_tbl_df to avoid confusion with other datasets in the R ecosystem. This naming convention helps distinguish this dataset as part of the ColombiAPI package and assists users in identifying its specific characteristics. The suffix 'tbl_df' indicates that the dataset is a tibble. The original content has not been modified in any way.

Source

Originally taken from Kaggle, url: https://www.kaggle.com/datasets/carlosbeltranv/colombian-coffee-2016

`get_airports_list` *Get the List of Airports in Colombia*

Description

This function retrieves a list of airports in Colombia from the public API "https://api-colombia.com/api/v1/Airport" and returns a data frame containing selected information about each airport, ordered by airport name in alphabetical order.

Usage

```
get_airports_list()
```

Details

This function sends a GET request to the API, processes the JSON response, and converts it into a structured data frame. The data is filtered and formatted to include only relevant columns, and it is ordered by the `name` column in alphabetical order (A to Z).

If the API returns a status code of 400, the function issues a warning message to inform the user of the error. Any other unexpected API response is not explicitly handled and may cause the function to fail.

Value

A data frame with the following columns:

- `id`: The unique identifier of the airport.
- `name`: The name of the airport.
- `iataCode`: The IATA code of the airport (if available).
- `oaciCode`: The OACI code of the airport (if available).
- `type`: The type of airport (e.g., commercial, private).
- `longitude`: The geographical longitude of the airport.
- `latitude`: The geographical latitude of the airport.

Note

Ensure you have an active internet connection to access the API. If the API structure changes or the API becomes unavailable, the function may need modifications.

This function relies on the following packages: `httr`, `jsonlite`, `dplyr`, and `magrittr`. The `%>%` operator, used for chaining commands, is provided by the `magrittr` package.

See Also

`GET`, `fromJSON`, `select`, `arrange`

Examples

```
## Not run:
# Retrieve the list of airports
airports <- get_airports_list()

# Print the data frame
print(airports)

# View the data in a spreadsheet-like interface
View(airports)

# Select airports located in a specific city (e.g., Bogotá)
bogota_airports <- airports %>%
  filter(grepl("Bogotá", name))
print(bogota_airports)
```

```
## End(Not run)
```

get_Colombia_info *Get Information About Colombia*

Description

This function makes an API call https://api-colombia.com/api/v1/Country/Colombia to retrieve information about Colombia, such as its name, surface area, population, time zone, currency, and region. It processes the API response and returns the data in a structured data.frame.

Usage

```
get_Colombia_info()
```

Details

The function sends a GET request to the API at `https://api-colombia.com/api/v1/Country/Colombia`. If the API returns a successful response (status code 200), the data is parsed and returned. If the response is unsuccessful or the structure is not as expected, the function will return `NULL`.

Value

A ‘data.frame‘ with the following columns:

- `name`: Name of the country.
- `surface`: The surface area of the country in square kilometers.
- `population`: The population of the country.
- `timeZone`: The time zone of the country.
- `currency`: The currency used in the country.
- `currencySymbol`: The currency symbol.
- `region`: The region of the country in the world.

Note

Ensure you have an active internet connection to access the API. If the API structure changes or the API becomes unavailable, the function may need modifications.

This function relies on the following packages: `httr` and `jsonlite`. These packages are used for making HTTP requests and processing JSON responses, respectively.

Examples

```
## Not run:
  # Call the function to get Colombia information
  colombia_info <- get_Colombia_info()

  # Print the result
  print(colombia_info)

## End(Not run)
```

get_departments_list *Get the List of Departments in Colombia*

Description

This function retrieves a list of departments in Colombia from the public API "https://api-colombia.com/api/v1/Department" and returns a data frame containing selected information about each department, ordered by department name in alphabetical order.

Usage

```
get_departments_list()
```

Details

This function sends a GET request to the API, processes the JSON response, and converts it into a structured data frame. The data is filtered and formatted to include only relevant columns (`id`, `name`, `surface`, `population`), and it is ordered by the `name` column in alphabetical order (A to Z).

If the API returns a status code other than 200, the function issues a message with the status code received and returns `NULL`.

Value

A data frame with the following columns:

- `id`: The unique identifier of the department.
- `name`: The name of the department.
- `surface`: The surface area of the department in square kilometers.
- `population`: The population of the department.

Note

Ensure you have an active internet connection to access the API. If the API structure changes or the API becomes unavailable, the function may need modifications.

This function relies on the following packages: `httr`, `jsonlite`, `dplyr`, and `magrittr`. The `%>%` operator, used for chaining commands, is provided by the `magrittr` package.

See Also

`GET`, `fromJSON`, `select`, `arrange`

Examples

```
## Not run:
# Retrieve the list of departments
departments <- get_departments_list()

# Print the data frame
print(departments)

# View the data in a spreadsheet-like interface
View(departments)

# Select departments with a specific population range
large_departments <- departments %>%
  filter(population > 1000000)
print(large_departments)

## End(Not run)
```

`get_presidents_list` *Get the List of Presidents of Colombia*

Description

This function retrieves the list of presidents of Colombia from the public API "https://api-colombia.com/api/v1/President" and returns a data frame containing selected information about each president, ordered by their start period date in descending order (most recent first).

Usage

```
get_presidents_list()
```

Details

This function sends a GET request to the API, processes the JSON response, and converts it into a structured data frame. The data is filtered and formatted to include only relevant columns, and it is ordered by the `startPeriodDate` column in descending order.

If the API returns a status code of 400, the function issues a warning message to inform the user of the error. Any other unexpected API response is not explicitly handled and may cause the function to fail.

Value

A data frame with the following columns:

- `id`: The unique identifier of the president.
- `name`: The first name of the president.
- `lastName`: The last name of the president.
- `startPeriodDate`: The start date of the presidential period (in ISO 8601 format).
- `endPeriodDate`: The end date of the presidential period (in ISO 8601 format).
- `politicalParty`: The political party of the president.

Note

Ensure you have an active internet connection to access the API. If the API structure changes or the API becomes unavailable, the function may need modifications.

This function relies on the following packages: `httr`, `jsonlite`, `dplyr`, and `magrittr`. The `%>%` operator, used for chaining commands, is provided by the `magrittr` package.

See Also

`GET`, `fromJSON`, `select`, `arrange`

Examples

```
## Not run:
# Retrieve the list of presidents
presidents <- get_president_list()

# Print the data frame
print(presidents)

# View the data in a spreadsheet-like interface
View(presidents)

# Select presidents from a specific political party
library(dplyr)
liberal_presidents <- presidents %>%
  filter(politicalParty == "Liberal")
print(liberal_presidents)

## End(Not run)
```

get_regions_list *Get the List of Regions in Colombia*

Description

This function retrieves a list of regions in Colombia from the public API "https://api-colombia.com/api/v1/Region" and returns a data frame containing selected information about each region, ordered by region name in alphabetical order.

Usage

```
get_regions_list()
```

Details

This function sends a GET request to the API, processes the JSON response, and converts it into a structured data frame. The data is filtered and formatted to include only relevant columns (`id` and `name`), and it is ordered by the `name` column in alphabetical order (A to Z).

If the API returns a status code other than 200, the function issues a message with the status code received and returns `NULL`.

Value

A data frame with the following columns:

- `id`: The unique identifier of the region.
- `name`: The name of the region.

Note

Ensure you have an active internet connection to access the API. If the API structure changes or the API becomes unavailable, the function may need modifications.

This function relies on the following packages: `httr`, `jsonlite`, `dplyr`, and `magrittr`. The `%>%` operator, used for chaining commands, is provided by the `magrittr` package.

See Also

`GET`, `fromJSON`, `select`, `arrange`

Examples

```
## Not run:
# Retrieve the list of regions
regions <- get_regions_list()

# Print the data frame
print(regions)
```

```
# View the data in a spreadsheet-like interface
View(regions)

# Select regions with specific characteristics (e.g., starting with "Atlántico")
atlantic_regions <- regions %>%
  filter(grepl("^Atlántico", name))
print(atlantic_regions)

## End(Not run)
```

`Medellin_rain_tbl_df` *Medellin Rainfall Information*

Description

This dataset, Medellin_rain_tbl_df, is a tibble containing information about rainfall measurements in Medellin, Colombia, including station identifiers, geographical coordinates, date of observation, and rainfall values.

Usage

```
data(Medellin_rain_tbl_df)
```

Format

A tibble with 185,705 observations and 8 variables:

station_id Numeric identifier for the rain observation station.

lat Numeric value representing the latitude of the station.

lon Numeric value representing the longitude of the station.

date Date of the rainfall observation.

year Numeric year of the observation.

month Numeric month of the observation.

day Numeric day of the observation.

rainfall Numeric value representing the amount of rainfall in millimeters.

Details

The dataset name has been kept as Medellin_rain_tbl_df to avoid confusion with other datasets in the R ecosystem. This naming convention helps distinguish this dataset as part of the ColombiAPI package and assists users in identifying its specific characteristics. The suffix 'tbl_df' indicates that the dataset is a tibble. The original content has not been modified in any way.

Source

Originally taken from the tidychangepoint package version 0.0.1.

Tulua_Public_Schools_tbl_df *Tulua Public Schools Information*

Description

This dataset, Tulua_Public_Schools_tbl_df, is a tibble containing detailed information about public schools located in the municipality of Tulua, Valle del Cauca, Colombia. It includes the name, location, contact information, and the geographical coordinates of each institution, as well as specific details about each school and its facilities.

Usage

```
data(Tulua_Public_Schools_tbl_df)
```

Format

A tibble with 105 observations and 8 variables:

COD_DANE_INS Numeric code representing the educational institution's DANE code.

INSTITUCION Character string representing the name of the public school.

SEDE Character string representing the name of the specific school location or branch.

COD_DANE_SEDE Numeric code representing the DANE code of the specific school branch.

TELEFONO Character string representing the phone number of the school.

CORREOS Character string representing the email addresses of the school.

DIRECCIÓN Character string representing the physical address of the school.

CORDE_GEO Character string representing the geographical coordinates of the school.

Details

The dataset name has been kept as Tulua_Public_Schools_tbl_df to avoid confusion with other datasets in the R ecosystem. This naming convention helps distinguish this dataset as part of the ColombiAPI package and assists users in identifying its specific characteristics. The suffix 'tbl_df' indicates that the dataset is a tibble. The original content has not been modified in any way.

Source

Originally taken from GOV.CO, url: https://www.datos.gov.co/Educaci-n/Listado-de-colegios-p-blicos-del-municipio-de-Tulu/scz9-f8ud/about_data

view_datasets *View Available Datasets in ColombiAPI*

Description

This function lists all datasets available in the 'ColombiAPI' package. If the 'ColombiAPI' package is not loaded, it stops and shows an error message. If no datasets are available, it returns a message and an empty vector.

Usage

```
view_datasets()
```

Value

A character vector with the names of the available datasets. If no datasets are found, it returns an empty character vector.

Examples

```
if (requireNamespace("ColombiAPI", quietly = TRUE)) {
  library(ColombiAPI)
  view_datasets()
}
```

Index

arrange, *9*, *12–14*

Bogota_airstations_df, 2
Bogota_business_Date, 3
Bogota_holidays_Date, 4
Bogota_malls_tbl_df, 4

Cannabis_Licenses_tbl_df, 5
Colombia_coffee_tbl_df, 7
ColombiAPI, 6
ColombiAPI-package *(*ColombiAPI*)*, 6

fromJSON, *9*, *12–14*

GET, *9*, *12–14*
get_airports_list, 8
get_Colombia_info, 10
get_departments_list, 11
get_presidents_list, 12
get_regions_list, 14

Medellin_rain_tbl_df, 15

select, *9*, *12–14*

Tulua_Public_Schools_tbl_df, 16

view_datasets, 17